

"Length of body, 8<sup>mm</sup>; width of head and also of the pygidium, 5<sup>mm</sup>; width of thorax, 4<sup>mm</sup>.

"This beautiful *Agnostus* is quite unlike any described American species, and is more nearly related to *A. integer* Beyrich, from the Primordial strata of Europe, than any other known to me. Compared with that species, it is found to reach a larger size; its glabella is narrowed in front instead of having its sides nearly parallel; the axial lobe of the pygidium is narrower behind than in front, instead of being of nearly the same width at each end, and has the sides of that lobe convex instead of nearly straight, as they are in *A. integer*."

Direct comparison with specimens of *Agnostus pisiformis* shows a striking similarity between it and *A. interstrictus*; the differences consist in the form, and this is owing largely to the compression to which *A. interstrictus* has been subjected. *Agnostus bidens* Meek (see Monographs U. S. Geol. Survey, vol. viii, p. 26) and *Agnostus tumidosus* H. & W. (Geol. Expl. Fortieth Par., vol. iv, p. 231), of the Upper Cambrian, are also closely connected with varieties of *A. pisiformis*.

Our knowledge of the American species of the genus *Agnostus* is now very imperfect, and much work is needed to obtain a thorough understanding of them.

A species of *Agnostus* occurs in the Prospect Mountain Cambrian limestone of the Eureka District, Nevada, that appears to be, in the head shields, identical with *A. interstrictus*. It also may be identified with *A. communis* H. & W. (Geol. Expl. Fortieth Par., vol. iv, p. 228, pl. 1, figs. 28, 29). Not wishing to introduce a doubtful occurrence of another species into the fauna, I identify the head shield with *A. interstrictus*, which we know to occur at about this horizon at another locality.

*Formation and localities*.—Middle Cambrian. Bluish-gray calcareous shale, House Range, Antelope Spring, Western Utah; Shaly limestone, 500 feet above quartzite, east slope Prospect Mountain, Eureka District, Nevada.

#### AGNOSTUS NOBILIS Ford.

Plate xvi, fig. 7.

*Agnostus nobilis* Ford, 1872. Amer. Jour. Sci., 3d ser., vol. iii, p. 421, figs. 1, 2.

*Original description*.—"Head and pygidium of nearly the same size and form, both exceedingly convex. The head is broadly semi-elliptical, wider than long, the length to the breadth about as 5 to 6. Convexity greatest along the median line, reaching its maximum on a straight line joining the posterior angles. From thence the slope is nearly equal to the front and sides. The sides, anterior margin, and part of the posterior margin, abruptly concave, rounded, and slightly incurved. Posterior angles rounded. The posterior outline is slightly concave for a short distance on either side of the middle, leaving a strong, tapering, median projection. The extremity of this projection is truncate and appears to form a nearly flat articulating face. The head is surrounded